

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDRAN0N010

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Trautvetteria caroliniensis*
COMMON NAME: Carolina Tassel-rue, Carolina bugbane, False bugbane.
SYNONYMS: *Hydrastis caroliniensis*
FAMILY: Ranunculaceae

AUTHOR, PLACE OF PUBLICATION: Vail, Anna Murray. Memoirs of the Torrey Botanical Club 2(2): 42. 1890.

TYPE LOCALITY: United States.

TYPE SPECIMEN: Natural History Museum, BM 1046837. M. Catesby, #s.n. 1722.

TAXONOMIC UNIQUENESS: *Trautvetteria* is a monotypic genus. Some treatments distinguish several varieties of the single species, *caroliniensis*.

DESCRIPTION: Herbs , 0.5-1.5 m. Rhizome with fascicles of fibrous roots. Stems 1-several, erect, usually unbranched below inflorescence, 0.5-1.5 m, glabrous or glabrate. Leaves: basal leaves with petiole to 4.5dm, blade 1-3(-4) dm wide, lobe apex acute; cauline leaves reduced toward apex of stem. Inflorescences: peduncle 1-8dm; pedicel densely pubescent with minute, hooked trichomes. Flowers: stamens white, 5-10 mm. Utricles papery, veins prominent along angles and on 2 adaxial faces.

AIDS TO IDENTIFICATION: *Trautvetteria* belongs to the Buttercup family which includes such other genera as *Actaea*, *Aquilegia*, *Clematis* and *Ranunculus*. The following key can be used to distinguish *Trautvetteria* from the other genera:

Flowers regular, seldom dark blue or purple.

Flowers with sepals or petals *not* spurred.

Perianth consisting of a single whorl, arbitrarily called sepals, but often petaloid in texture and color.

Leaves deeply lobed or compound; perianth showy or not.

Leaves alternate; flowers greenish, inconspicuous.

Leaves simple, palmately lobed or parted; flowers perfect; anthers oval or ovate, 1mm long or less.....*Trautvetteria*

ILLUSTRATIONS:

Photos: [http://swbiodiversity.org/seinet/taxa/index.php?taxon=Trautvetteria caroliniensis](http://swbiodiversity.org/seinet/taxa/index.php?taxon=Trautvetteria_caroliniensis).

Photos, Herbarium Mounts, Line Drawing: <http://eol.org/pages/596366/media>.

TOTAL RANGE: The distribution in the United States is disjunct, which supports the idea of eastern and western varieties. In the eastern U.S., the species ranges from Pennsylvania to Florida, and west to Missouri and Arkansas (not found in Ohio and presumed extirpated from Indiana). *T. caroliniensis* has not been found from N. Dakota south to Texas. In the west, the species ranges from New Mexico to Montana, and west to California up to British Columbia. It is also found in Mexico and Asia.

RANGE WITHIN ARIZONA: Known from two historic collections in Arizona, neither one with enough information to map an accurate location. One general location is in the White Mountains of Apache County, near the headwaters of the Black River. The other is in Greenlee County, some 30 miles north of Morenci along the Coronado Trail.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial herb, with rhizomes, and erect stem to 1.5m.

PHENOLOGY: Flowers during the summer. One of the Arizona collections was in flower in mid-July.

BIOLOGY:

HABITAT: In general, woody seepage slopes, stream banks, bogs, rarely prairies of bluffs. In Utah occurs along boggy stream sides and shaded slopes in aspen-spruce-fir communities at elevations from 9000 – 9840 feet (2745-3000m). One of the Arizona collections was from 9100 feet in a spruce-pine community, the other was from near a spring in high mountain timber.

ELEVATION: Range-wide: 0 – 12,500 feet (0-3800m). In near-by Utah, 9000 – 9840 feet (2745-3000m) and collected in Arizona at 9100 feet (2775m).

EXPOSURE: Not specified, but probably shaded.

SUBSTRATE: Not specified, but can occur in moist to saturated soils.

PLANT COMMUNITY: Western spruce-fir forests and subalpine meadows. Collected from spruce-pine community in Arizona.

POPULATION HISTORY AND TRENDS: Unknown in Arizona. Global status considered secure, but indicated as critically imperiled in the several Rocky Mountain states (Wyoming, Colorado, Utah) and Arizona.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.
STATE STATUS: None.
OTHER STATUS: None.

MANAGEMENT FACTORS: None specified.

PROTECTIVE MEASURES TAKEN: None.

SUGGESTED PROJECTS: Since both of the known collections are historical, it would be good to know if the plant is still extant within the State. However, given the vague directions given, it is not possible to revisit a known collection location. Because the plant is fairly large and showy when in flower, field explorations during the flowering season might prove to be advantageous. The plant was in flower in mid-July for one of the collections.

LAND MANAGEMENT/OWNERSHIP: Unknown, because the actual collection locations could not be accurately mapped.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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<http://explorer.natureserve.org/servlet/NatureServe?searchSciOrCommonName=Trautvetteria&x=14&y=15>.
Tropicos, accessed 8/15/2014, <http://www.tropicos.org/Name/27100859>.
Welsh, Stanley L., N. Duane Atwood, Sherel Goodrich and Larry C. Higgins, eds.. 1993. A Utah Flora, 2nd Edition, revised. Brigham Young University, Provo, Utah. p. 569, 585.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION: The numerous white stamens make *Trautvetteria caroliniensis* an attractive ornamental, and it is reportedly easy to grow. The genus is named for the botanist Ernst Rudolf von Trautvetter.

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